

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023



### WEEKLY UPDATE

#### Humans

##### West Nile virus

A single (1) human case of West Nile virus (WNV) has been reported from Tulare County; **this is the first WNV human case reported in California in 2023.** In addition, one asymptomatic WNV-positive blood donor was reported from Butte County. At this time last year, 5 human cases of WNV had been reported from 4 counties.

##### St. Louis encephalitis virus

No human cases of St. Louis encephalitis virus (SLEV) have been reported this week. In 2023, 1 human case of SLEV has been reported from 1 county. At this time last year, 1 human case of SLEV had been reported from one county.

#### Dead Birds

A total of 23 new WNV positive dead birds were reported this week from 8 counties: Contra Costa (1), Placer (2), Sacramento (15), San Joaquin (1), Santa Clara (1), Stanislaus (1), Tulare (1), and Yolo (1). **This is the first detection of a WNV positive bird in Contra Costa County this year.** In 2023, 113 WNV positive dead birds have been reported from 13 counties. At this time last year, 36 WNV positive dead birds had been reported from 10 counties.

#### Mosquito Pools

##### West Nile virus

A total of 294 new WNV positive mosquito pools were identified from 21 counties: Alameda (3), Butte (2), Fresno (21), Kern (1), Kings (6), Lake (2), Los Angeles (12), Madera (11), Merced (2), Placer (28), Riverside (1), Sacramento (25), San Bernardino (3), San Joaquin (43), Shasta (7), Solano (2), Stanislaus (25), Sutter (17), Tulare (48), Yolo (31), and Yuba (4). **This is the first detection of WNV activity in Lake, Madera, and Shasta counties this year.** In 2023, 827 WNV positive mosquito pools have been reported from 22 counties. At this time last year, 480 WNV positive mosquito pools had been reported from 21 counties.

##### St. Louis encephalitis virus

A total of 28 new SLEV positive mosquito pools were identified from 5 counties: Fresno (8), Kings (2), Riverside (15), San Joaquin (1), and Tulare (2). **This is the first detection of SLEV activity in Kings and San Joaquin counties this year.** In 2023, 111 SLEV positive mosquito pools have been reported from 7 counties. At this time last year, 7 SLEV positive pools had been reported from 4 counties.

#### Sentinel Chickens

A total of 5 WNV positive chickens were reported this week from Merced County. **These are the first WNV positive chickens reported from Merced County this year.** In 2023, 5 WNV positive chickens have been reported from 1 county. At this time last year, 2 WNV positive chickens had been reported from 2 counties.

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

<b>2022 &amp; 2023 YTD West Nile Virus Comparisons</b>		
	<b>2022</b>	<b>2023</b>
Total No. Dead Bird Reports	2,774	3,175
No. Positive Counties	23	24
No. Human Cases	5	1
No. Positive Dead Birds / No. Tested	36 / 717	113 / 744
No. Positive Mosquito Pools / No. Tested	480 / 15,615	827 / 24,443
No. Seroconversions / No. Tested	2 / 2,349	5 / 1,732

<b>YTD WNV Activity by Element and County, 2023</b>					
<b>County</b>	<b>Humans</b>	<b>Horses</b>	<b>Dead Birds</b>	<b>Mosquito Pools</b>	<b>Sentinel Chickens</b>
Alameda			3	4	
Butte				5	
Contra Costa			1	2	
Fresno				24	
Kern		1		16	
Kings				19	
Lake				2	
Los Angeles			10	45	
Madera				11	
Merced				6	5
Placer			10	65	
Riverside			4	5	
Sacramento			52	96	
San Bernadino				7	
San Joaquin			8	154	
Santa Clara			14		
Shasta				7	
Solano			1	5	
Stanislaus			1	57	
Sutter				26	
Tulare	1		3	195	
Ventura			3		
Yolo			3	71	
Yuba				5	
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>113</b>	<b>827</b>	<b>5</b>

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

YTD SLEV Activity by Element and County, 2023			
County	Humans*	Mosquito Pools	Sentinel Chickens
Fresno		13	
Imperial		1	
Kern	1	10	
Kings		2	
Riverside		77	
San Joaquin		1	
Tulare		7	
<b>Totals</b>	<b>1</b>	<b>111</b>	<b>0</b>

\*Asymptomatic human infections of SLEV are not included.

### TESTING SUMMARIES

		WNV	SLEV	WEEV
Human Cases	Week	1	0	0
	YTD	1	1	0

		Positive / Total Tested					
		WNV	SLEV	WEEV	CHIK	DENV	ZIKA
Dead Birds	Week	23 / 67					
	YTD	113 / 744					
Chicken Sera	Week	5 / 154	0 / 154	0 / 154			
	YTD	5 / 1,732	0 / 1,732	0 / 1,732			
Mosquito Pools	Week	294 / 2,411	28 / 2,370	0 / 2,368	0 / 0	0 / 0	0 / 0
	YTD	827 / 24,443	111 / 23,874	0 / 23,871	0 / 223	0 / 223	0 / 223

### NEW POSITIVES

#### Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Contra Costa	Contra Costa MVCD	Brentwood	94513	California Scrub-Jay	7/14/23	WNV
Placer	Placer MVCD	Roseville	95747	California Scrub-Jay	7/17/23	WNV
Placer	Placer MVCD	Roseville	95747	House Finch	7/12/23	WNV
Sacramento	Sacramento-Yolo MVCD	Carmichael	95608	California Scrub-Jay	7/18/23	WNV
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95758	American Crow	7/11/23	WNV
Sacramento	Sacramento-Yolo MVCD	Foothill Farms	95842	California Scrub-Jay	7/14/23	WNV
Sacramento	Sacramento-Yolo MVCD	Orangevale	95662	American Crow	7/12/23	WNV

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

Sacramento	Sacramento-Yolo MVCD	Rio Linda	95673	American Crow	7/16/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95820	American Crow	7/12/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95820	American Crow	7/13/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95842	American Crow	7/13/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95842	American Crow	7/13/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95818	American Crow	7/15/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95831	American Crow	7/17/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95829	California Scrub-Jay	7/12/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95864	California Scrub-Jay	7/14/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95823	Cooper's Hawk	7/18/23	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95829	House Finch	7/14/23	WNV
San Joaquin	San Joaquin Co MVCD	Stockton	95219	American Crow	7/18/23	WNV
Santa Clara	Santa Clara Co VCD	Palo Alto	94303	American Crow	7/9/23	WNV
Stanislaus	East Side MAD	Modesto	95355	California Scrub-Jay	7/8/23	WNV
Tulare	Delta MVCD	Exeter	93221	American Robin	7/21/23	WNV
Yolo	Sacramento-Yolo MVCD	Davis	95616	Red-tailed Hawk	7/18/23	WNV

### Mosquito Pools

County	Site Code	Pool #	Species	City	# in Pool	Trap	Collected	Virus
Alameda	ALCO 43	30233	Cx tarsalis	Fremont	41	CO2	7/19/23	WNV
Alameda	ALCO 539572	30255	Cx tarsalis	Fremont	25	CO2	7/20/23	WNV
Alameda	ALCO 869812	30273	Cx tarsalis	Newark	31	CO2	7/18/23	WNV
Butte	BUCO 123	251	Cx tarsalis	Oroville	50	CO2	7/11/23	WNV
Butte	BUCO 169	248	Cx tarsalis	Nelson	50	CO2	7/10/23	WNV
Fresno	CNSL 1041	161	Cx tarsalis	Fresno	50	CO2	7/13/23	WNV
Fresno	CNSL 1062	164	Cx quinquefasciatus	Fresno	24	GRVD	7/13/23	WNV
Fresno	CNSL 1068	648	Cx quinquefasciatus	Fresno	37	GRVD	7/13/23	WNV
Fresno	CNSL 1087	163	Cx tarsalis	Fresno	42	CO2	7/13/23	WNV
Fresno	CNSL 1242	647	Cx tarsalis	Fresno	16	GRVD	7/13/23	WNV
Fresno	CNSL 2020	656	Cx stigmatosoma	Clovis	50	GRVD	7/14/23	SLEV
Fresno	CNSL 2086	140	Cx quinquefasciatus	Sanger	48	GRVD	7/12/23	WNV
Fresno	CNSL 3249	155	Cx stigmatosoma	Reedley	45	GRVD	7/11/23	WNV
Fresno	CNSL 8127	160	Cx quinquefasciatus	Fresno	28	GRVD	7/13/23	WNV
Fresno	FRNO 150	635	Cx quinquefasciatus	Fresno	50	GRVD	7/18/23	WNV
Fresno	FRNO 156	611	Cx quinquefasciatus	Fresno	50	GRVD	7/13/23	SLEV
Fresno	FRNO 156	621	Cx quinquefasciatus	Fresno	44	BGSENT	7/13/23	SLEV
Fresno	FRNO 178	606	Cx quinquefasciatus	Fresno	39	GRVD	7/13/23	SLEV
Fresno	FRNO 229	629	Cx quinquefasciatus	Fresno	40	GRVD	7/18/23	WNV
Fresno	FRNO 235	634	Cx quinquefasciatus	Fresno	50	GRVD	7/18/23	WNV
Fresno	FRNO 253	607	Cx quinquefasciatus	Fresno	34	GRVD	7/13/23	WNV
Fresno	FRNO 259	612	Cx quinquefasciatus	Fresno	45	GRVD	7/13/23	WNV
Fresno	FRNO 8	627	Cx quinquefasciatus	Fresno	50	GRVD	7/18/23	SLEV
Fresno	FRNO 8	628	Cx tarsalis	Fresno	50	GRVD	7/18/23	SLEV
Fresno	FRNO 87	601	Cx quinquefasciatus	Fresno	50	GRVD	7/12/23	SLEV
Fresno	FRNO 93	630	Cx quinquefasciatus	Fresno	17	GRVD	7/18/23	WNV
Fresno	FRWS 100006	252	Cx tarsalis	Dos Palos	50	CO2	7/18/23	WNV
Fresno	FRWS 1202	247	Cx tarsalis	Dos Palos	50	CO2	7/18/23	WNV
Fresno	FRWS 200003	243	Cx tarsalis	Dos Palos	50	CO2	7/18/23	WNV
Fresno	FRWS 200003	245	Cx tarsalis	Dos Palos	25	GRVD	7/18/23	WNV
Fresno	FRWS 300031	250	Cx tarsalis	Firebaugh	26	CO2	7/18/23	WNV
Fresno	FRWS 400030	239	Cx tarsalis	Tranquillity	50	CO2	7/14/23	WNV
Fresno	FRWS 5101	257	Cx tarsalis	Mendota	50	CO2	7/18/23	WNV
Fresno	FRWS 5116	255	Cx tarsalis	Tranquillity	36	CO2	7/18/23	SLEV
Kern	KERN 28	1045	Cx tarsalis	Bakersfield	26	CO2	7/13/23	WNV
Kings	KNGS 3024	287	Cx tarsalis	Lemoore	50	CO2	7/13/23	SLEV
Kings	KNGS 3024	289	Cx tarsalis	Lemoore	50	CO2	7/13/23	WNV
Kings	KNGS 3044	275	Cx tarsalis	Lemoore	50	CO2	7/12/23	WNV

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

Kings	KNGS 3072	293	Cx pipiens	Hanford	16	CO2	7/13/23	SLEV
Kings	KNGS 3082	283	Cx tarsalis	Lemoore	50	CO2	7/12/23	WNV
Kings	KNGS 3137	272	Cx tarsalis	Stratford	50	CO2	7/11/23	WNV
Kings	KNGS 3137	273	Cx tarsalis	Stratford	50	CO2	7/11/23	WNV
Kings	KNGS 3137	274	Cx tarsalis	Stratford	50	CO2	7/11/23	WNV
Lake	LAKE 250	119	Cx tarsalis	Lakeport	50	CO2	23-07-11	WNV
Lake	LAKE 367	139	Cx tarsalis	Kelseyville	33	CO2	23-07-11	WNV
Los Angeles	GRLA 2007	5403	Cx quinquefasciatus	Toluca Lake	50	GRVD	7/12/23	WNV
Los Angeles	GRLA 2936	5399	Cx quinquefasciatus	Burbank	50	GRVD	7/11/23	WNV
Los Angeles	SGVA 1074	316	Cx quinquefasciatus	Temple City	49	GRVD	7/18/23	WNV
Los Angeles	SGVA 1139	335	Cx quinquefasciatus	Covina	43	GRVD	7/20/23	WNV
Los Angeles	SGVA 1217	334	Cx quinquefasciatus	Covina	50	GRVD	7/20/23	WNV
Los Angeles	SGVA 1280	333	Cx quinquefasciatus	Covina	50	GRVD	7/20/23	WNV
Los Angeles	SGVA 1288	338	Cx quinquefasciatus	Covina	9	GRVD	7/20/23	WNV
Los Angeles	SGVA 508	331	Cx quinquefasciatus	Covina	50	GRVD	7/20/23	WNV
Los Angeles	SGVA 509	321	Cx quinquefasciatus	Glendora	50	GRVD	7/18/23	WNV
Los Angeles	SGVA 62	329	Cx quinquefasciatus	Covina	50	GRVD	7/20/23	WNV
Los Angeles	SGVA 64	339	Cx quinquefasciatus	West Covina	18	GRVD	7/20/23	WNV
Los Angeles	SGVA 953	337	Cx quinquefasciatus	Covina	50	GRVD	7/20/23	WNV
Madera	MADR 1057	40	Cx tarsalis	Chowchilla	50	CO2	7/11/23	WNV
Madera	MADR 208	22	Cx quinquefasciatus	Madera	50	CO2	7/7/23	WNV
Madera	MADR 299	46	Cx tarsalis	Chowchilla	50	CO2	7/11/23	WNV
Madera	MADR 311	4	Cx quinquefasciatus	Madera	50	CO2	7/6/23	WNV
Madera	MADR 3334	15	Cx quinquefasciatus	Madera	50	CO2	7/6/23	WNV
Madera	MADR 581	11	Cx tarsalis	Madera	50	CO2	7/6/23	WNV
Madera	MADR 688	56	Cx tarsalis	Madera	50	CO2	7/12/23	WNV
Madera	MADR 688	64	Cx quinquefasciatus	Madera	49	CO2	7/12/23	WNV
Madera	MADR 690	19	Cx tarsalis	Madera	50	CO2	7/7/23	WNV
Madera	MADR 697	41	Cx tarsalis	Firebaugh	50	CO2	7/11/23	WNV
Madera	MADR 967	63	Cx tarsalis	Madera	50	CO2	7/12/23	WNV
Merced	MERC 369128	578	Cx tarsalis	Merced	46	BGSENT	7/18/23	WNV
Merced	MERC 898642	570	Cx tarsalis	Stevinson	50	CO2	7/13/23	WNV
Placer	PLCR 1113	741	Cx tarsalis	Pleasant Grove	50	CO2	7/18/23	WNV
Placer	PLCR 1113	742	Cx tarsalis	Pleasant Grove	50	CO2	7/18/23	WNV
Placer	PLCR 1113	743	Cx tarsalis	Pleasant Grove	50	CO2	7/18/23	WNV
Placer	PLCR 1113	744	Cx tarsalis	Pleasant Grove	50	CO2	7/18/23	WNV
Placer	PLCR 1113	745	Cx tarsalis	Pleasant Grove	50	CO2	7/18/23	WNV
Placer	PLCR 1114	705	Cx pipiens	Lincoln	5	CO2	7/18/23	WNV
Placer	PLCR 1114	708	Cx tarsalis	Lincoln	50	CO2	7/18/23	WNV
Placer	PLCR 139	698	Cx tarsalis	Roseville	50	CO2	7/18/23	WNV
Placer	PLCR 139	700	Cx tarsalis	Roseville	50	CO2	7/18/23	WNV
Placer	PLCR 139	701	Cx tarsalis	Roseville	50	CO2	7/18/23	WNV
Placer	PLCR 17	730	Cx tarsalis	Sheridan	50	CO2	7/18/23	WNV
Placer	PLCR 17	731	Cx tarsalis	Sheridan	50	CO2	7/18/23	WNV
Placer	PLCR 17	732	Cx tarsalis	Sheridan	50	CO2	7/18/23	WNV
Placer	PLCR 17	734	Cx tarsalis	Sheridan	50	CO2	7/18/23	WNV
Placer	PLCR 191218	679	Cx tarsalis	Roseville	50	CO2	7/18/23	WNV
Placer	PLCR 191373	712	Cx tarsalis	Unknown	50	CO2	7/18/23	WNV
Placer	PLCR 191373	714	Cx tarsalis	Unknown	50	CO2	7/18/23	WNV
Placer	PLCR 25	746	Cx tarsalis	Lincoln	50	CO2	7/18/23	WNV
Placer	PLCR 25	747	Cx tarsalis	Lincoln	50	CO2	7/18/23	WNV
Placer	PLCR 25	748	Cx tarsalis	Lincoln	50	CO2	7/18/23	WNV
Placer	PLCR 30	718	Cx pipiens	Lincoln	50	CO2	7/18/23	WNV
Placer	PLCR 466642	772	Cx tarsalis	Roseville	3	CO2	7/19/23	WNV
Placer	PLCR 516	693	Cx tarsalis	Roseville	46	CO2	7/18/23	WNV
Placer	PLCR 678519	724	Cx tarsalis	Elverta	50	CO2	7/18/23	WNV
Placer	PLCR 678519	727	Cx tarsalis	Elverta	50	CO2	7/18/23	WNV
Placer	PLCR 79	690	Cx tarsalis	Roseville	6	CO2	7/18/23	WNV
Placer	PLCR 873343	668	Cx tarsalis	Roseville	6	CO2	7/13/23	WNV
Placer	PLCR 88	662	Cx tarsalis	Lincoln	26	CO2	7/13/23	WNV
Riverside	COAV 0	3784	Cx tarsalis	Indio	13	CO2	7/14/23	SLEV
Riverside	COAV 0	3786	Cx tarsalis	Indio	50	CO2	7/14/23	SLEV



## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

Riverside	COAV 0	3787	Cx tarsalis	Indio	14	CO2	7/14/23	SLEV
Riverside	COAV 130	3763	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 130	3764	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 130	3765	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 130	3766	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 130	3767	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 15	3803	Cx tarsalis	Thermal	18	CO2	7/18/23	SLEV
Riverside	COAV 2	3805	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 5	3768	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 5	3769	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 5	3771	Cx tarsalis	Oasis	50	CO2	7/18/23	SLEV
Riverside	COAV 8	3739	Cx tarsalis	Oasis	19	CO2	7/18/23	SLEV
Riverside	COAV 9	3735	Cx tarsalis	Thermal	9	CO2	7/18/23	SLEV
Riverside	RIVR 90	156	Cx tarsalis	Nuevo	47	CO2	7/6/23	WNV
Sacramento	SAYO 150	2994	Cx tarsalis	Sacramento	11	CO2	7/18/23	WNV
Sacramento	SAYO 150	2995	Cx pipiens	Sacramento	5	GRVD	7/18/23	WNV
Sacramento	SAYO 212021	3132	Cx tarsalis	Sacramento	15	CO2	7/18/23	WNV
Sacramento	SAYO 213009	3104	Cx pipiens	Sacramento	16	GRVD	7/18/23	WNV
Sacramento	SAYO 213048	3095	Cx pipiens	Sacramento	11	CO2	7/18/23	WNV
Sacramento	SAYO 213048	3097	Cx pipiens	Sacramento	3	GRVD	7/18/23	WNV
Sacramento	SAYO 214011	2961	Cx pipiens	Fair Oaks	50	CO2	7/14/23	WNV
Sacramento	SAYO 214011	2965	Cx pipiens	Fair Oaks	12	GRVD	7/14/23	WNV
Sacramento	SAYO 222001	3222	Cx pipiens	Sacramento	12	GRVD	7/18/23	WNV
Sacramento	SAYO 222032	3239	Cx pipiens	Sacramento	50	GRVD	7/18/23	WNV
Sacramento	SAYO 222050	3026	Cx pipiens	Sacramento	28	CO2	7/18/23	WNV
Sacramento	SAYO 222065	3264	Cx pipiens	Sacramento	50	GRVD	7/19/23	WNV
Sacramento	SAYO 223006	3232	Cx pipiens	S. Watt Avenue	16	GRVD	7/18/23	WNV
Sacramento	SAYO 223016	2997	Cx tarsalis	Sacramento	16	CO2	7/18/23	WNV
Sacramento	SAYO 223017	3168	Cx tarsalis	Sacramento	50	CO2	7/18/23	WNV
Sacramento	SAYO 223017	3170	Cx pipiens	Sacramento	12	GRVD	7/18/23	WNV
Sacramento	SAYO 223019	3004	Cx pipiens	Sacramento	2	CO2	7/18/23	WNV
Sacramento	SAYO 223044	3244	Cx pipiens	Sacramento	45	GRVD	7/18/23	WNV
Sacramento	SAYO 233009	3247	Cx tarsalis	Elk Grove	50	CO2	7/18/23	WNV
Sacramento	SAYO 233054	2987	Cx tarsalis	Sacramento	15	GRVD	7/18/23	WNV
Sacramento	SAYO 233116	3182	Cx tarsalis	Sacramento	39	CO2	7/18/23	WNV
Sacramento	SAYO 243026	2905	Cx tarsalis	Elk Grove	22	CO2	7/14/23	WNV
Sacramento	SAYO 397919	3030	Cx pipiens	Sacramento	16	BGSENT	7/18/23	WNV
Sacramento	SAYO 397919	3031	Cx tarsalis	Sacramento	4	BGSENT	7/18/23	WNV
Sacramento	SAYO 411984	2958	Cx pipiens	Orangevale	38	BGSENT	7/14/23	WNV
San Bernardino	WVAL 257	965	Cx quinquefasciatus	Upland	19	GRVD	7/18/23	WNV
San Bernardino	WVAL 4568	958	Cx quinquefasciatus	Upland	14	GRVD	7/18/23	WNV
San Bernardino	WVAL 4721	1003	Cx quinquefasciatus	Chino	41	BGSENT	7/19/23	WNV
San Joaquin	SJCM 8003	1568	Cx tarsalis	Tracy	40	CO2	7/18/23	WNV
San Joaquin	SJCM 8008	1510	Cx tarsalis	Manteca	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8010	1531	Cx tarsalis	Ripon	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8010	1532	Cx tarsalis	Ripon	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8010	1533	Cx tarsalis	Ripon	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8010	1534	Cx tarsalis	Ripon	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8010	1535	Cx tarsalis	Ripon	38	CO2	7/18/23	WNV
San Joaquin	SJCM 8018	1629	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8018	1631	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8018	1632	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8018	1633	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8025	1610	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8025	1611	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8025	1612	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8025	1613	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8025	1614	Cx tarsalis	Stockton	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8027	1574	Cx tarsalis	Stockton	46	CO2	7/18/23	WNV
San Joaquin	SJCM 8029	1662	Cx tarsalis	Farmington	13	CO2	7/20/23	WNV
San Joaquin	SJCM 8039	1596	Cx tarsalis	Lodi	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8039	1600	Cx tarsalis	Lodi	50	CO2	7/18/23	WNV

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

San Joaquin	SJCM 8048	1647	Cx tarsalis	Stockton	50	CO2	7/20/23	WNV
San Joaquin	SJCM 8056	1490	Cx tarsalis	Manteca	39	CO2	7/18/23	WNV
San Joaquin	SJCM 8074	1670	Cx tarsalis	Morada	31	CO2	7/20/23	WNV
San Joaquin	SJCM 8084	1642	Cx tarsalis	Stockton	23	CO2	7/20/23	WNV
San Joaquin	SJCM 8100	1572	Cx pipiens	Tracy	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8111	1517	Cx tarsalis	Stockton	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8125	1650	Cx pipiens	Stockton	23	CO2	7/20/23	WNV
San Joaquin	SJCM 8161	1550	Cx tarsalis	Ripon	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8161	1551	Cx tarsalis	Ripon	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8161	1553	Cx pipiens	Ripon	26	CO2	7/18/23	WNV
San Joaquin	SJCM 8161	1553	Cx pipiens	Ripon	26	CO2	7/18/23	SLEV
San Joaquin	SJCM 8199	1506	Cx tarsalis	Manteca	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8203	1602	Cx tarsalis	Lodi	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8203	1605	Cx tarsalis	Lodi	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8205	1644	Cx pipiens	Farmington	51	CO2	7/20/23	WNV
San Joaquin	SJCM 8206	1634	Cx tarsalis	Lodi	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8206	1636	Cx tarsalis	Lodi	100	CO2	7/18/23	WNV
San Joaquin	SJCM 8218	1659	Cx tarsalis	Escalon	14	CO2	7/20/23	WNV
San Joaquin	SJCM 8218	1660	Cx pipiens	Escalon	7	CO2	7/20/23	WNV
San Joaquin	SJCM 8219	1557	Cx tarsalis	Stockton	50	CO2	7/18/23	WNV
San Joaquin	SJCM 8222	1651	Cx tarsalis	Stockton	50	CO2	7/20/23	WNV
San Joaquin	SJCM 8222	1652	Cx tarsalis	Stockton	12	CO2	7/20/23	WNV
San Joaquin	SJCM 8236	1491	Cx tarsalis	Manteca	26	CO2	7/18/23	WNV
San Joaquin	SJCM 8249	1560	Cx pipiens	Tracy	5	CO2	7/18/23	WNV
Shasta	SHAS 10020	975	Cx pipiens	Anderson	50	CO2	7/18/23	WNV
Shasta	SHAS 10020	978	Cx pipiens	Anderson	50	CO2	7/18/23	WNV
Shasta	SHAS 331	1015	Cx tarsalis	Millville	50	CO2	7/19/23	WNV
Shasta	SHAS 5002	917	Cx pipiens	Anderson	50	CO2	7/18/23	WNV
Shasta	SHAS 549	895	Cx pipiens	Anderson	45	BGPRO-SENT	7/17/23	WNV
Shasta	SHAS 619	1063	Cx tarsalis	Redding	25	CO2	7/19/23	WNV
Shasta	SHAS 918	999	Cx tarsalis	Redding	50	CO2	7/18/23	WNV
Solano	SOLA 100014	228	Cx tarsalis	Fairfield	43	CO2	7/19/23	WNV
Solano	SOLA 303	229	Cx tarsalis	Suisun City	50	CO2	7/19/23	WNV
Stanislaus	EAST 1088	23120	Cx tarsalis	Modesto	50	CO2	7/12/23	WNV
Stanislaus	EAST 2016	23122	Cx pipiens	Oakdale	32	CO2	7/13/23	WNV
Stanislaus	EAST 2045	23125	Cx pipiens	Riverbank	21	GRVD	7/13/23	WNV
Stanislaus	TRLK 1209	1024	Cx tarsalis	Ceres	50	CO2	7/18/23	WNV
Stanislaus	TRLK 1209	1025	Cx tarsalis	Ceres	50	CO2	7/18/23	WNV
Stanislaus	TRLK 1209	1026	Cx tarsalis	Ceres	50	CO2	7/18/23	WNV
Stanislaus	TRLK 1219	1075	Cx tarsalis	Modesto	38	CO2	7/18/23	WNV
Stanislaus	TRLK 1309	1072	Cx pipiens	Hughson	46	CO2	7/18/23	WNV
Stanislaus	TRLK 1310	1019	Cx pipiens	Hughson	40	CO2	7/18/23	WNV
Stanislaus	TRLK 17131	1051	Cx pipiens	Turlock	50	CO2	7/18/23	WNV
Stanislaus	TRLK 17131	1052	Cx tarsalis	Turlock	33	CO2	7/18/23	WNV
Stanislaus	TRLK 17152	1044	Cx pipiens	Denair	50	CO2	7/18/23	WNV
Stanislaus	TRLK 17152	1048	Cx pipiens	Denair	45	CO2	7/18/23	WNV
Stanislaus	TRLK 18181	1058	Cx pipiens	Hickman	50	CO2	7/18/23	WNV
Stanislaus	TRLK 1905	1069	Cx pipiens	Denair	50	CO2	7/18/23	WNV
Stanislaus	TRLK 1966	1077	Cx pipiens	Hughson	50	CO2	7/18/23	WNV
Stanislaus	TRLK 1966	1078	Cx pipiens	Hughson	44	CO2	7/18/23	WNV
Stanislaus	TRLK 406	1008	Cx pipiens	Turlock	31	CO2	7/18/23	WNV
Stanislaus	TRLK 407	1030	Cx pipiens	Turlock	50	CO2	7/18/23	WNV
Stanislaus	TRLK 408	1035	Cx pipiens	Turlock	50	CO2	7/18/23	WNV
Stanislaus	TRLK 408	1036	Cx pipiens	Turlock	28	CO2	7/18/23	WNV
Stanislaus	TRLK 432	1041	Cx pipiens	Turlock	41	CO2	7/18/23	WNV
Stanislaus	TRLK 536	1011	Cx pipiens	Turlock	50	CO2	7/18/23	WNV
Stanislaus	TRLK 613	1063	Cx pipiens	Hickman	50	CO2	7/18/23	WNV
Stanislaus	TRLK 613	1064	Cx pipiens	Hickman	50	CO2	7/18/23	WNV
Sutter	SUYA 14	331	Cx tarsalis	Sutter	50	REST	7/17/23	WNV
Sutter	SUYA 20	284	Cx tarsalis	Meridian	50	CO2	7/18/23	WNV
Sutter	SUYA 20	285	Cx tarsalis	Meridian	49	CO2	7/18/23	WNV
Sutter	SUYA 24	333	Cx tarsalis	Yuba City	50	REST	7/17/23	WNV

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

Sutter	SUYA 24	334	Cx tarsalis	Yuba City	50	REST	7/17/23	WNV
Sutter	SUYA 24	335	Cx tarsalis	Yuba City	50	REST	7/17/23	WNV
Sutter	SUYA 27	300	Cx tarsalis	Tierra Buena	43	CO2	7/20/23	WNV
Sutter	SUYA 27	301	Cx tarsalis	Tierra Buena	44	CO2	7/20/23	WNV
Sutter	SUYA 3	306	Cx tarsalis	Yuba City	48	CO2	7/20/23	WNV
Sutter	SUYA 30	328	Cx tarsalis	Live Oak	50	REST	7/17/23	WNV
Sutter	SUYA 31	338	Cx tarsalis	Rio Oso	50	REST	7/17/23	WNV
Sutter	SUYA 44	292	Cx tarsalis	Pleasant Grove	50	CO2	7/18/23	WNV
Sutter	SUYA 44	293	Cx tarsalis	Pleasant Grove	50	CO2	7/18/23	WNV
Sutter	SUYA 5	302	Cx tarsalis	Live Oak	47	CO2	7/20/23	WNV
Sutter	SUYA 70	290	Cx tarsalis	Yuba City	40	CO2	7/18/23	WNV
Sutter	SUYA 71	342	Cx tarsalis	Meridian	50	REST	7/17/23	WNV
Sutter	SUYA 9	286	Cx tarsalis	Sutter	43	CO2	7/18/23	WNV
Tulare	DLTA 64064	4480	Cx stigmatosoma	Dinuba	20	CO2	7/14/23	WNV
Tulare	DLTA 64071	4529	Cx quinquefasciatus	Dinuba	25	BGSENT	7/18/23	WNV
Tulare	DLTA 6518	4418	Cx quinquefasciatus	Cutler	50	GRVD	7/13/23	WNV
Tulare	DLTA 6520	4407	Cx quinquefasciatus	Cutler	11	BGSENT	7/13/23	WNV
Tulare	DLTA 8413	4513	Cx quinquefasciatus	Visalia	26	BGSENT	7/18/23	WNV
Tulare	DLTA 8413	4514	Cx tarsalis	Visalia	10	BGSENT	7/18/23	WNV
Tulare	DLTA 8413	4539	Cx quinquefasciatus	Visalia	15	GRVD	7/19/23	WNV
Tulare	DLTA 8413	4568	Cx quinquefasciatus	Visalia	36	BGSENT	7/19/23	WNV
Tulare	DLTA 8413	4590	Cx quinquefasciatus	Visalia	50	BGSENT	7/19/23	WNV
Tulare	DLTA 8414	4518	Cx quinquefasciatus	Visalia	41	BGSENT	7/18/23	WNV
Tulare	DLTA 841543	4552	Cx quinquefasciatus	Visalia	32	CO2	7/19/23	WNV
Tulare	DLTA 84194	4488	Cx quinquefasciatus	Visalia	10	GRVD	7/14/23	WNV
Tulare	DLTA 8422	4578	Cx quinquefasciatus	Goshen	26	BGSENT	7/19/23	WNV
Tulare	DLTA 8423	4468	Cx quinquefasciatus	Visalia	23	GRVD	7/14/23	WNV
Tulare	DLTA 84231	4499	Cx quinquefasciatus	Visalia	11	GRVD	7/18/23	WNV
Tulare	DLTA 8425	4417	Cx quinquefasciatus	Visalia	33	BGSENT	7/13/23	WNV
Tulare	DLTA 8425	4459	Cx quinquefasciatus	Visalia	45	GRVD	7/14/23	WNV
Tulare	DLTA 8426	4536	Cx quinquefasciatus	Visalia	16	GRVD	7/19/23	WNV
Tulare	DLTA 8435	4515	Cx quinquefasciatus	Visalia	18	GRVD	7/18/23	WNV
Tulare	DLTA 84352	4538	Cx quinquefasciatus	Visalia	17	GRVD	7/19/23	WNV
Tulare	DLTA 8436	4510	Cx quinquefasciatus	Visalia	12	GRVD	7/18/23	WNV
Tulare	DLTA 85192	4541	Cx quinquefasciatus	Visalia	21	GRVD	7/19/23	WNV
Tulare	DLTA 8522	4452	Cx quinquefasciatus	Visalia	45	GRVD	7/14/23	WNV
Tulare	DLTA 8527	4543	Cx quinquefasciatus	Visalia	16	GRVD	7/19/23	WNV
Tulare	DLTA 8527	4563	Cx quinquefasciatus	Visalia	50	BGSENT	7/19/23	WNV
Tulare	DLTA 8528	4442	Cx quinquefasciatus	Visalia	32	GRVD	7/14/23	WNV
Tulare	DLTA 8528	4500	Cx quinquefasciatus	Visalia	21	GRVD	7/18/23	WNV
Tulare	DLTA 8529	4550	Cx quinquefasciatus	Visalia	21	GRVD	7/19/23	WNV
Tulare	DLTA 85301	4506	Cx quinquefasciatus	Visalia	17	GRVD	7/18/23	WNV
Tulare	DLTA 85302	4540	Cx quinquefasciatus	Visalia	13	GRVD	7/19/23	WNV
Tulare	DLTA 85304	4440	Cx quinquefasciatus	Visalia	50	GRVD	7/14/23	WNV
Tulare	DLTA 85304	4441	Cx quinquefasciatus	Visalia	34	GRVD	7/14/23	WNV
Tulare	DLTA 8531	4461	Cx quinquefasciatus	Visalia	27	GRVD	7/14/23	WNV
Tulare	DLTA 8531	4527	Cx quinquefasciatus	Visalia	12	BGSENT	7/18/23	WNV
Tulare	DLTA 8532	4470	Cx quinquefasciatus	Visalia	50	GRVD	7/14/23	WNV
Tulare	DLTA 8532	4574	Cx quinquefasciatus	Visalia	11	GRVD	7/19/23	WNV
Tulare	DLTA 8533	4507	Cx quinquefasciatus	Visalia	44	GRVD	7/18/23	WNV
Tulare	DLTA 9401	4472	Cx quinquefasciatus	Visalia	20	GRVD	7/14/23	SLEV
Tulare	DLTA 9401	4481	Cx quinquefasciatus	Visalia	20	BGSENT	7/14/23	WNV
Tulare	DLTA 95014	4489	Cx quinquefasciatus	Farmersville	34	GRVD	7/14/23	WNV
Tulare	DLTA 9504	4551	Cx quinquefasciatus	Visalia	23	BGSENT	7/19/23	WNV
Tulare	DLTA 95044	4477	Cx quinquefasciatus	Visalia	22	GRVD	7/14/23	WNV
Tulare	DLTA 9505	4473	Cx quinquefasciatus	Visalia	41	GRVD	7/14/23	WNV
Tulare	DLTA 9505	4474	Cx quinquefasciatus	Visalia	10	GRVD	7/14/23	WNV
Tulare	DLTA 9506	4528	Cx quinquefasciatus	Visalia	40	GRVD	7/18/23	WNV
Tulare	DLTA 9511	4419	Cx quinquefasciatus	Famersville	37	BGSENT	7/13/23	SLEV
Tulare	DLTA 96033	4403	Cx quinquefasciatus	Exeter	18	GRVD	7/13/23	WNV
Tulare	DLTA 9610	4558	Cx quinquefasciatus	Exeter	46	BGSENT	7/19/23	WNV
Tulare	DLTA 96104	4548	Cx quinquefasciatus	Exeter	38	GRVD	7/19/23	WNV



## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

Tulare	KNGS 3021	299	Cx tarsalis	Waukena	50	CO2	7/14/23	WNV
Yolo	SAYO 103012	3111	Cx pipiens	Woodland	50	CO2	7/18/23	WNV
Yolo	SAYO 103012	3112	Cx pipiens	Woodland	38	CO2	7/18/23	WNV
Yolo	SAYO 103012	3116	Cx pipiens	Woodland	50	GRVD	7/18/23	WNV
Yolo	SAYO 103012	3117	Cx pipiens	Woodland	50	GRVD	7/18/23	WNV
Yolo	SAYO 103012	3118	Cx pipiens	Woodland	50	GRVD	7/18/23	WNV
Yolo	SAYO 114001	3047	Cx tarsalis	Zamora	50	CO2	7/18/23	WNV
Yolo	SAYO 115008	3179	Cx tarsalis	Woodland	50	CO2	7/18/23	WNV
Yolo	SAYO 116002	3051	Cx pipiens	Knights Landing	4	GRVD	7/18/23	WNV
Yolo	SAYO 123005	2924	Cx tarsalis	Madison	50	CO2	7/14/23	WNV
Yolo	SAYO 123005	2925	Cx tarsalis	Madison	45	CO2	7/14/23	WNV
Yolo	SAYO 124007	2868	Cx tarsalis	Woodland	50	CO2	7/14/23	WNV
Yolo	SAYO 124007	2877	Cx pipiens	Woodland	4	GRVD	7/14/23	WNV
Yolo	SAYO 125016	2833	Cx tarsalis	Woodland	50	CO2	7/14/23	WNV
Yolo	SAYO 135005	2874	Cx tarsalis	Woodland	50	CO2	7/14/23	WNV
Yolo	SAYO 135005	2875	Cx pipiens	Woodland	3	GRVD	7/14/23	WNV
Yolo	SAYO 135006	2849	Cx tarsalis	Woodland	50	CO2	7/14/23	WNV
Yolo	SAYO 135006	2852	Cx tarsalis	Woodland	50	CO2	7/14/23	WNV
Yolo	SAYO 135006	2853	Cx tarsalis	Woodland	33	CO2	7/14/23	WNV
Yolo	SAYO 136007	3076	Cx tarsalis	Woodland	50	CO2	7/18/23	WNV
Yolo	SAYO 136008	3055	Cx tarsalis	Davis	50	CO2	7/18/23	WNV
Yolo	SAYO 145003	3146	Cx tarsalis	Davis	35	CO2	7/18/23	WNV
Yolo	SAYO 145005	3123	Cx tarsalis	Davis	50	CO2	7/18/23	WNV
Yolo	SAYO 145005	3124	Cx tarsalis	Davis	50	CO2	7/18/23	WNV
Yolo	SAYO 145005	3127	Cx pipiens	Davis	11	GRVD	7/18/23	WNV
Yolo	SAYO 145009	3155	Cx tarsalis	Davis	50	CO2	7/18/23	WNV
Yolo	SAYO 145028	3164	Cx tarsalis	Davis	28	CO2	7/18/23	WNV
Yolo	SAYO 146	2860	Cx tarsalis	Woodland	50	CO2	7/14/23	WNV
Yolo	SAYO 146002	3201	Cx tarsalis	Davis	50	CO2	7/18/23	WNV
Yolo	SAYO 146017	3061	Cx pipiens	Davis	11	CO2	7/18/23	WNV
Yolo	SAYO 146017	3065	Cx tarsalis	Davis	50	CO2	7/18/23	WNV
Yolo	SAYO 147013	3172	Cx tarsalis	W. Sacramento	50	CO2	7/18/23	WNV
Yuba	SUYA 37	317	Cx tarsalis	Marysville	49	CO2	7/20/23	WNV
Yuba	SUYA 40	309	Cx tarsalis	Linda	22	CO2	7/20/23	WNV
Yuba	SUYA 55	320	Cx tarsalis	Linda	50	CO2	7/20/23	WNV
Yuba	SUYA 7	298	Cx tarsalis	Marysville	41	REST	7/19/23	WNV

### Sentinel Chickens

County	Site Code	Nearest City	Date Bled	Virus	Band 01	Band 02
Merced	MERC 1	Merced	7/14/23	WNV	2620	2624
Merced	MERC 6	Merced	7/14/23	WNV	2626	2627
Merced	MERC 502	Hilmar	7/14/23	WNV	2606	

## California Arbovirus Surveillance Bulletin #15

Week 29 Friday, July 21, 2023

### TEST PROTOCOLS

#### **Humans:**

Specimens are tested by local laboratories with an IgM or IgG immunofluorescent assay (IFA) and/or an IgM enzyme immunoassay (EIA). Specimens with inconclusive results are forwarded to the California Department of Public Health Viral and Rickettsial Disease Laboratory (VRDL) for further testing with a plaque reduction neutralization test (PRNT).

---

#### **Dead Birds**

Oral swab samples collected from bird carcasses are tested at the UC Davis Arbovirus Research and Training laboratory (DART) or at a local agency for West Nile virus by RT-qPCR.

---

#### **Sentinel Chickens:**

Dried blood spot samples from sentinel chickens are tested at the California Department of Public Health Vector-Borne Disease Laboratory for IgG antibodies to West Nile, St. Louis encephalitis, and western equine encephalomyelitis viruses by an EIA. Positive samples are confirmed by IFA, western-blot, or PRNT.

---

#### **Mosquito Pools:**

Mosquito pools are tested at DART or at a local agency for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a multiplex RT-qPCR. Invasive *Aedes* mosquitoes (*Ae. aegypti* and *Ae. albopictus*) are also tested at DART for chikungunya, dengue, and Zika viral RNA by a separate RT-qPCR.

---

*Website Information:* For updated information on WNV in California, please visit the California WNV website, <https://westnile.ca.gov>, or the California Vector-Borne Disease Surveillance System website, <https://maps.vectorsurv.org>.

Prepared by the Vector-Borne Disease Section (Infectious Diseases Branch), California Department of Public Health, 850 Marina Bay Parkway, Richmond, CA 94804. Questions concerning this bulletin should be addressed to Hannah Romo: [Hannah.romo@cdph.ca.gov](mailto:Hannah.romo@cdph.ca.gov)